



California Integrated Waste Management Board Environmental Field Sampling Training Course Competency Exam

Instructions: Complete each question with the best answer based on the information presented in this course.

1. Name two types of EPA sampling plans. (2 points)
 2. What does the acronym DQO mean? (1 point)
 3. What are DQOs? (1 point)
 4. Name two types of sampling schemes. (2 points)
 5. Which sampling scheme is preferred for the delineation of extent of contamination? (1 point)
 6. What computer program is available to assist with statistical sampling designs? (1 point)
 7. Name two types of samples (not types of matrices). (2 points)
 8. Name two sampling devices used to collect subsurface soil samples. (2 points)
 9. Which is better for collection of a volatile compound in the air, a Tedlar bag or Summa Canister? (1 point)
 10. Which is the California method for determination of the soluble contaminants in a sample, TCLP, TTLC, or STLC? (1 point)
 11. A soil sample result indicated 12 mg/kg total cadmium. The TTCL limit is 100 mg/kg, STLC limit is 1 mg/L, and TCLP limit is 1.0 mg/L for cadmium. What test, if any, would you recommend be performed on this sample next? (1 point)
 12. The STLC result for the soil sample in question 11 was 0.5 mg/L for cadmium. Is the soil considered hazardous waste? (1 point)
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ANSWERS (cont.)

13. The TCLP result for the soil sample in question 11 was 1.2 mg/L for cadmium. Is the soil considered a RCRA or California hazardous waste? (1 point)

14. Which container is used for collection a water sample for volatile analysis, a 1 L poly, 40 ml VOA vial, or 1 L glass amber? (1 point)

15. Why are samples cooled to $4^{\circ} \pm 2^{\circ}\text{C}$? (1 point)

16. What is the primary difference in the equipment decontamination procedure when collecting samples for metal versus organic analysis? (2 points)

17. Name two types of field QC samples and their purpose. (4 points)

18. Name two types of lab QC samples. (2 points)

19. What is the State of California laboratory certification program, NELAP, ELAP, or NVLAP? (1 point)

20. What are two methods of retaining sample chain of custody? (2 points)

21. What instrument is appropriate for determining the presence of VOCs in air for health and safety purposes? (1 point)

22. A Geiger-Muller (GM) detector will detect which types of nuclear radiation? (3 points)

23. Is it necessary to homogenize sample before analysis? (1 point)

24. List three important types of information to document while conducting an investigation. (3 points)

25. Will you develop better sampling plans after taking this course and why? (2 points)